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NT

Client:

LumCAT: 1633-M 铝反光罩

Luminaire: GH36D-B40 Hodel

Report No: 2024509-B003

Ballast type: AC

Test No: 2024509-C003

Voltage(V): 32.900

LampCAT: LUMINUS CXM-14-AC40

Current(A): 0.381

Lamp flux(lm): 2175.0

Power (W): 12.534

Number of Lamps: 1

PF: 0.000

Length(mm): 0

Width(mm): 0

Phm Type: C

Height(mm): 0

Photometric Results

Lumens(lm): 2035.78, Efficiency(%): 93.60% , Luminous Efficacy(lm/W): 162.42

Central intensity(cd): 3376.953, Maximum intensity(cd): 3376.953

Angle of maximum intensity: C=0.0 γ =0.0

Beam Angle(50%Imax): [C0/180]Total=37.0

[C90/270]Total=37.0

Field angle(10%Imax): [C0/180]Total=87.6

[C90/270]Total=87.6

Maximum s/h(1/2): C0_180=0.61 C90_270=0.61

Maximum s/h(1/4): C0_180=0.61 C90_270=0.61

Up flux rate of lamp(%): 0.00%

Down flux rate of lamp(%): 93.60%

Up flux rate of LUM(%): - -

Down flux rate of LUM(%): 100.00%

CIE Type : Direct lighting

Output flux ratio in π solid angle : 98.839%

Equipment: GMS1980
Temperature(°C): 25.0

Date: 2024/5/9
Humidity(%): 60.0%

Operator: NT07
Distance(m): 7.65

NT 1633-M 铝反光罩

Zonal flux distribution table

Appendix Page: 2 Total:19

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
0.0	3376.953	0.000	0	0.00%	0.00%
1.0	3375.417	3.231	3.231	0.15%	0.16%
2.0	3365.761	9.676	12.906	0.44%	0.63%
3.0	3353.544	16.070	28.977	0.74%	1.42%
4.0	3334.524	22.387	51.364	1.03%	2.52%
5.0	3305.921	28.567	79.931	1.31%	3.93%
6.0	3264.736	34.531	114.461	1.59%	5.62%
7.0	3213.675	40.211	154.673	1.85%	7.60%
8.0	3137.303	45.453	200.125	2.09%	9.83%
9.0	3047.618	50.125	250.251	2.30%	12.29%
10.0	2943.155	54.214	304.465	2.49%	14.96%
11.0	2827.646	57.662	362.127	2.65%	17.79%
12.0	2692.020	60.338	422.465	2.77%	20.75%
13.0	2541.252	62.106	484.571	2.86%	23.80%
14.0	2397.433	63.215	547.786	2.91%	26.91%
15.0	2245.128	63.735	611.521	2.93%	30.04%
16.0	2082.947	63.418	674.939	2.92%	33.15%
17.0	1929.838	62.490	737.429	2.87%	36.22%
18.0	1770.218	61.006	798.435	2.80%	39.22%
19.0	1607.525	58.766	857.201	2.70%	42.11%
20.0	1439.083	55.761	912.962	2.56%	44.85%
21.0	1292.367	52.449	965.412	2.41%	47.42%
22.0	1206.807	50.222	1015.634	2.31%	49.89%
23.0	1107.714	48.565	1064.198	2.23%	52.27%
24.0	1017.516	46.465	1110.664	2.14%	54.56%
25.0	943.134	44.581	1155.245	2.05%	56.75%
26.0	887.852	43.221	1198.465	1.99%	58.87%
27.0	841.298	42.304	1240.769	1.95%	60.95%
28.0	807.186	41.736	1282.505	1.92%	63.00%
29.0	778.364	41.482	1323.988	1.91%	65.04%
30.0	754.333	41.383	1365.37	1.90%	67.07%
31.0	732.314	41.371	1406.742	1.90%	69.10%
32.0	713.982	41.435	1448.176	1.91%	71.14%
33.0	696.893	41.565	1489.741	1.91%	73.18%
34.0	680.368	41.680	1531.421	1.92%	75.23%
35.0	661.538	41.675	1573.096	1.92%	77.27%
36.0	639.292	41.419	1614.514	1.90%	79.31%
37.0	611.238	40.785	1655.3	1.88%	81.31%

NT 1633-M 铝反光罩

Zonal flux distribution table

Appendix Page: 3 Total:19

$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
38.0	579.153	39.734	1695.033	1.83%	83.26%
39.0	542.035	38.269	1733.303	1.76%	85.14%
40.0	503.432	36.462	1769.765	1.68%	86.93%
41.0	461.296	34.354	1804.118	1.58%	88.62%
42.0	418.597	31.968	1836.086	1.47%	90.19%
43.0	372.393	29.301	1865.387	1.35%	91.63%
44.0	327.989	26.434	1891.821	1.22%	92.93%
45.0	285.604	23.581	1915.403	1.08%	94.09%
46.0	252.642	21.050	1936.452	0.97%	95.12%
47.0	206.680	18.268	1954.721	0.84%	96.02%
48.0	171.076	15.271	1969.991	0.70%	96.77%
49.0	118.910	11.908	1981.9	0.55%	97.35%
50.0	87.030	8.586	1990.486	0.39%	97.78%
51.0	58.508	6.158	1996.644	0.28%	98.08%
52.0	38.091	4.145	2000.789	0.19%	98.28%
53.0	25.267	2.756	2003.545	0.13%	98.42%
54.0	18.720	1.939	2005.484	0.09%	98.51%
55.0	15.355	1.521	2007.005	0.07%	98.59%
56.0	12.912	1.277	2008.282	0.06%	98.65%
57.0	11.353	1.109	2009.391	0.05%	98.70%
58.0	10.168	0.995	2010.387	0.05%	98.75%
59.0	9.290	0.910	2011.296	0.04%	98.80%
60.0	8.574	0.844	2012.14	0.04%	98.84%
61.0	8.157	0.798	2012.939	0.04%	98.88%
62.0	7.915	0.774	2013.713	0.04%	98.92%
63.0	7.842	0.766	2014.48	0.04%	98.95%
64.0	7.791	0.767	2015.247	0.04%	98.99%
65.0	7.725	0.768	2016.015	0.04%	99.03%
66.0	7.688	0.769	2016.784	0.04%	99.07%
67.0	7.637	0.771	2017.554	0.04%	99.10%
68.0	7.601	0.772	2018.326	0.04%	99.14%
69.0	7.571	0.774	2019.1	0.04%	99.18%
70.0	7.549	0.777	2019.877	0.04%	99.22%
71.0	7.527	0.779	2020.656	0.04%	99.26%
72.0	7.527	0.783	2021.439	0.04%	99.30%
73.0	7.476	0.785	2022.223	0.04%	99.33%
74.0	7.476	0.786	2023.009	0.04%	99.37%
75.0	7.447	0.788	2023.798	0.04%	99.41%

NT 1633-M 铝反光罩

Zonal flux distribution table

Appendix Page: 4 Total:19

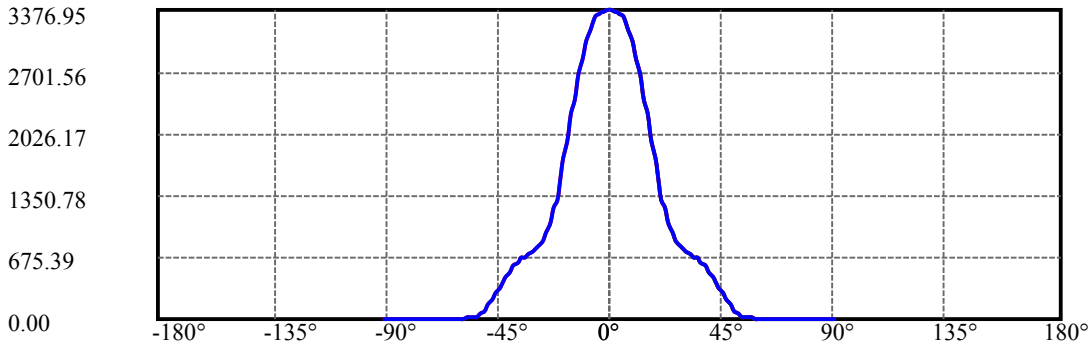
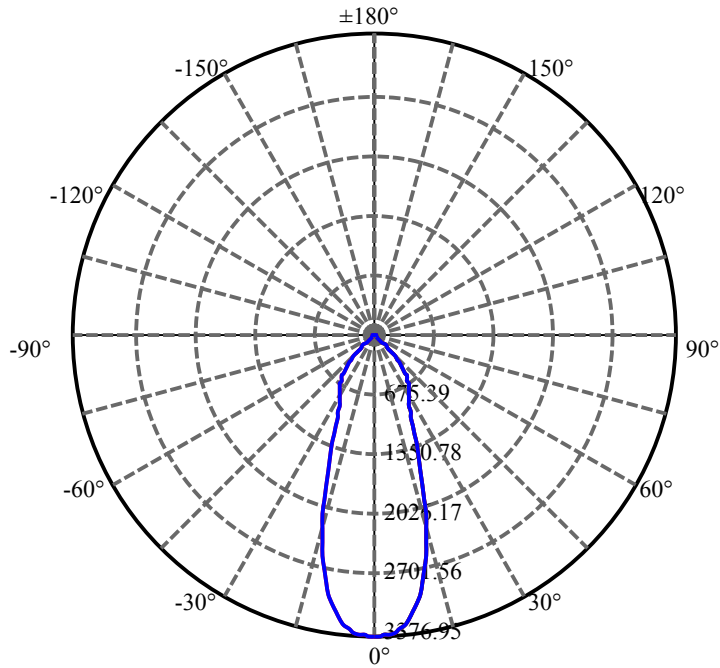
$\gamma(^{\circ})$	Average I(cd)	Zonal F(lm)	Sum F(lm)	Eff Flux(%)	Eff Sum(%)
76.0	7.425	0.789	2024.587	0.04%	99.45%
77.0	7.418	0.791	2025.379	0.04%	99.49%
78.0	7.418	0.794	2026.173	0.04%	99.53%
79.0	7.396	0.796	2026.969	0.04%	99.57%
80.0	7.388	0.797	2027.766	0.04%	99.61%
81.0	7.381	0.799	2028.565	0.04%	99.65%
82.0	7.359	0.799	2029.364	0.04%	99.69%
83.0	7.359	0.800	2030.164	0.04%	99.72%
84.0	7.352	0.801	2030.965	0.04%	99.76%
85.0	7.337	0.802	2031.767	0.04%	99.80%
86.0	7.323	0.801	2032.568	0.04%	99.84%
87.0	7.315	0.801	2033.37	0.04%	99.88%
88.0	7.323	0.802	2034.171	0.04%	99.92%
89.0	7.308	0.802	2034.973	0.04%	99.96%
90.0	7.315	0.802	2035.775	0.04%	100.00%

ZONAL LUMEN SUMMARY

Zone	Lumens	%Lamp	%Fixt
0-30	1365.37	62.78%	67.07%
0-40	1769.76	81.37%	86.93%
0-60	2012.14	92.51%	98.84%
0-90	2034.97	93.56%	99.96%
0-120	2034.97	93.56%	99.96%
0-180	2035.78	93.60%	100.00%
60-90	22.83	1.05%	1.12%
90-120	0.00	0.00%	0.00%
90-130	0.00	0.00%	0.00%
90-150	0.00	0.00%	0.00%
90-180	0.00	0.00%	0.00%
0-36.35	1628.62	74.88%	80.00%

ZONAL LUMEN SUMMARY

0-10	304.47
10-20	608.50
20-30	452.41
30-40	404.39
40-50	220.72
50-60	21.65
60-70	7.74
70-80	7.89
80-90	7.21
90-100	0.00
100-110	0.00
110-120	0.00
120-130	0.00
130-140	0.00
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



C0(Max): —————

C0/C180: —————

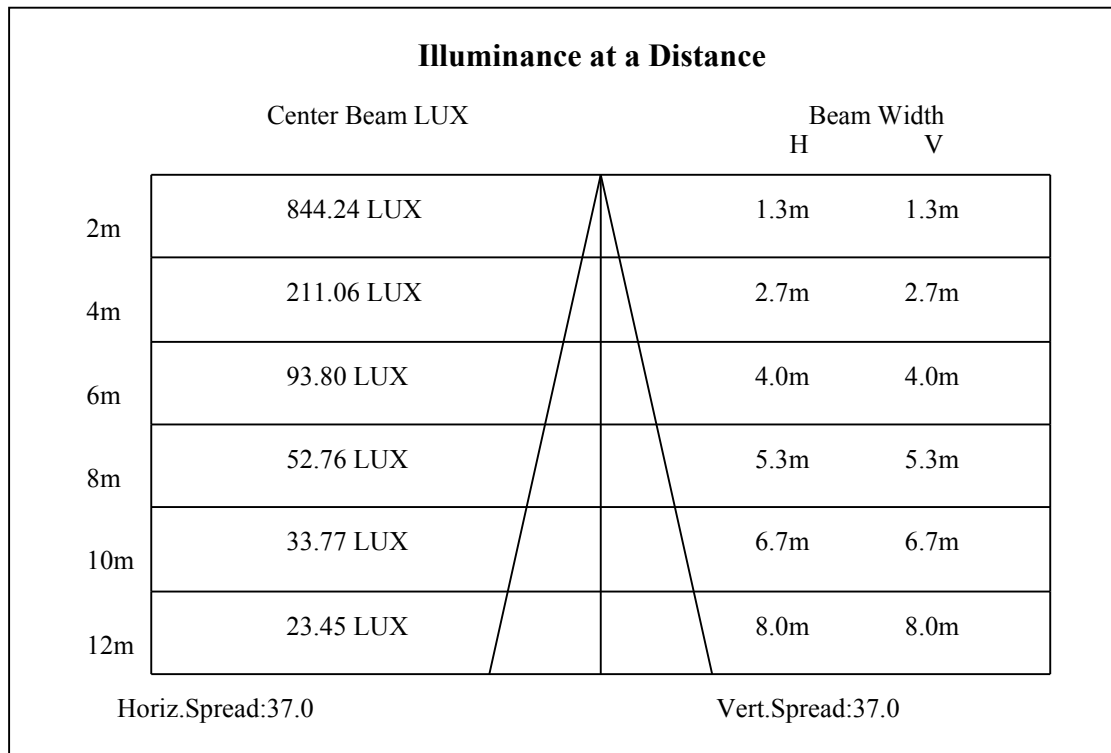
C90/C270: —————

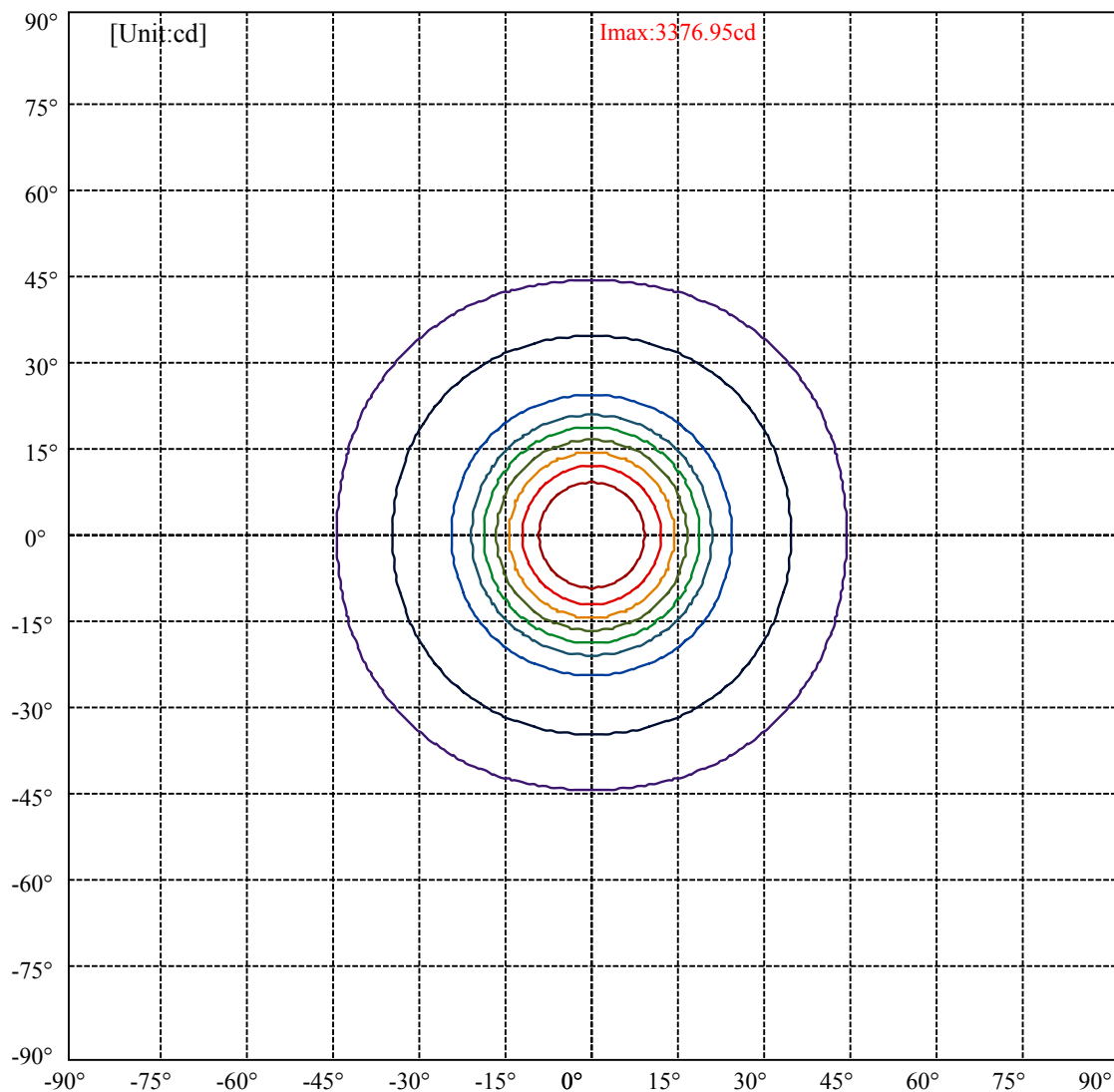
Field angle(10%Imax):C0/180Left:43.8 Right:43.8

:C90/270Left:43.8 Right:43.8

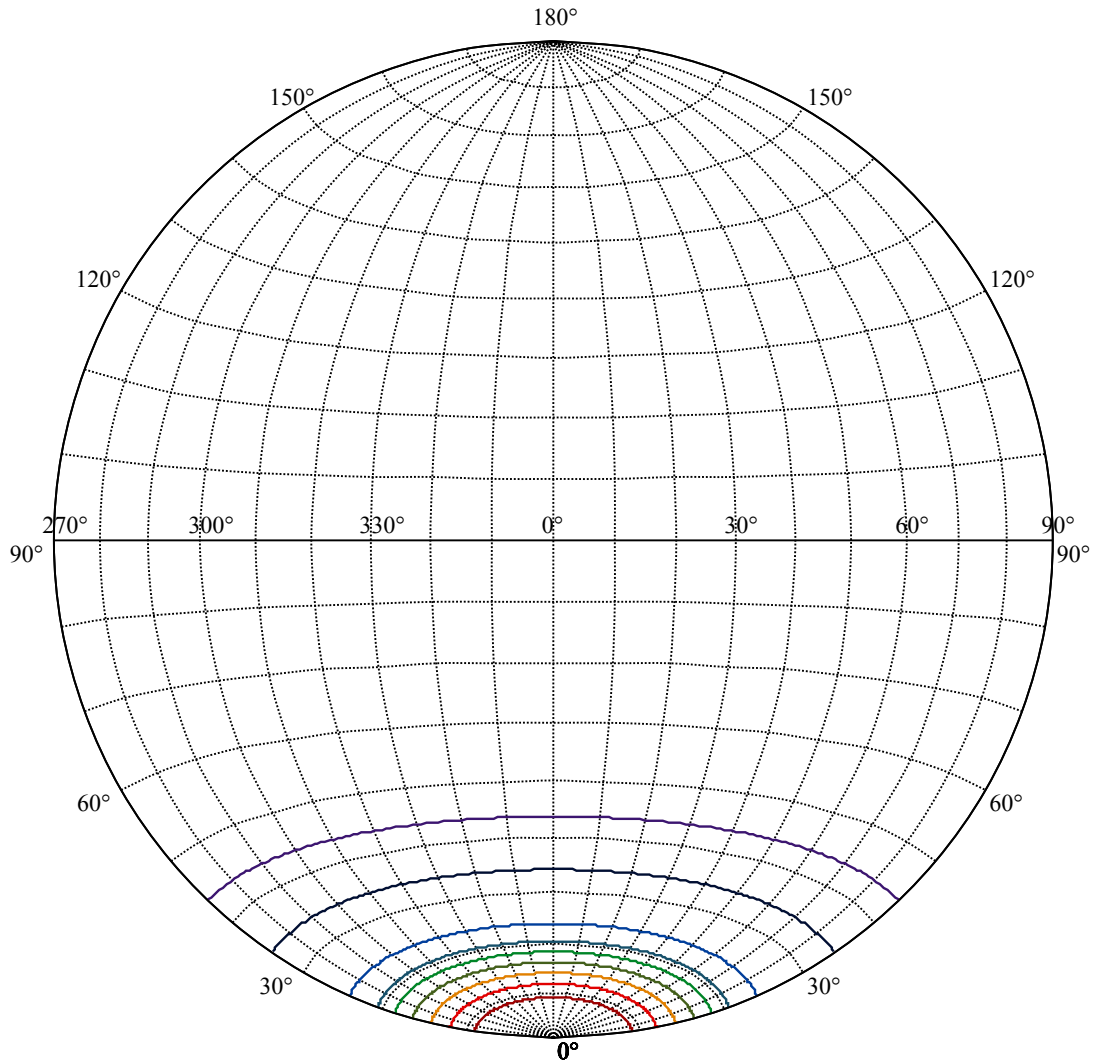
Beam Angle(50%Imax):C0/180Left:18.5 Right:18.5

:C90/270Left:18.5 Right:18.5





(10%Imax) 337.695	—
(20%Imax) 675.391	—
(30%Imax) 1013.09	—
(40%Imax) 1350.78	—
(50%Imax) 1688.48	—
(60%Imax) 2026.17	—
(70%Imax) 2363.87	—
(80%Imax) 2701.56	—
(90%Imax) 3039.26	—



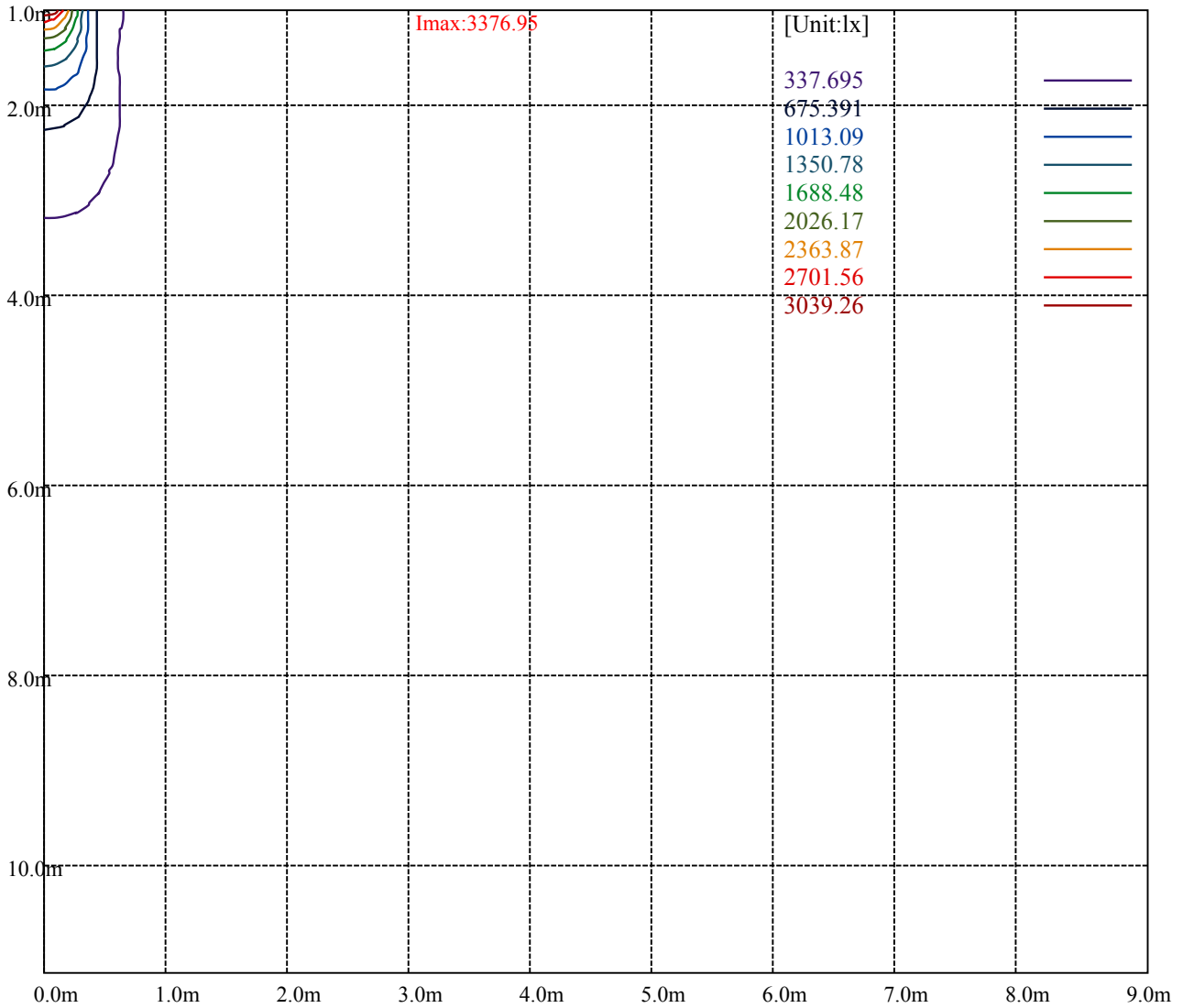
House

[Unit:cd]

Road

Imax:3376.95

(10%Imax)	337.695	—
(20%Imax)	675.391	—
(30%Imax)	1013.09	—
(40%Imax)	1350.78	—
(50%Imax)	1688.48	—
(60%Imax)	2026.17	—
(70%Imax)	2363.87	—
(80%Imax)	2701.56	—
(90%Imax)	3039.26	—



NT 1633-M 铝反光罩

Luminance Limiting Curve(no luminous side)

Luminance Table

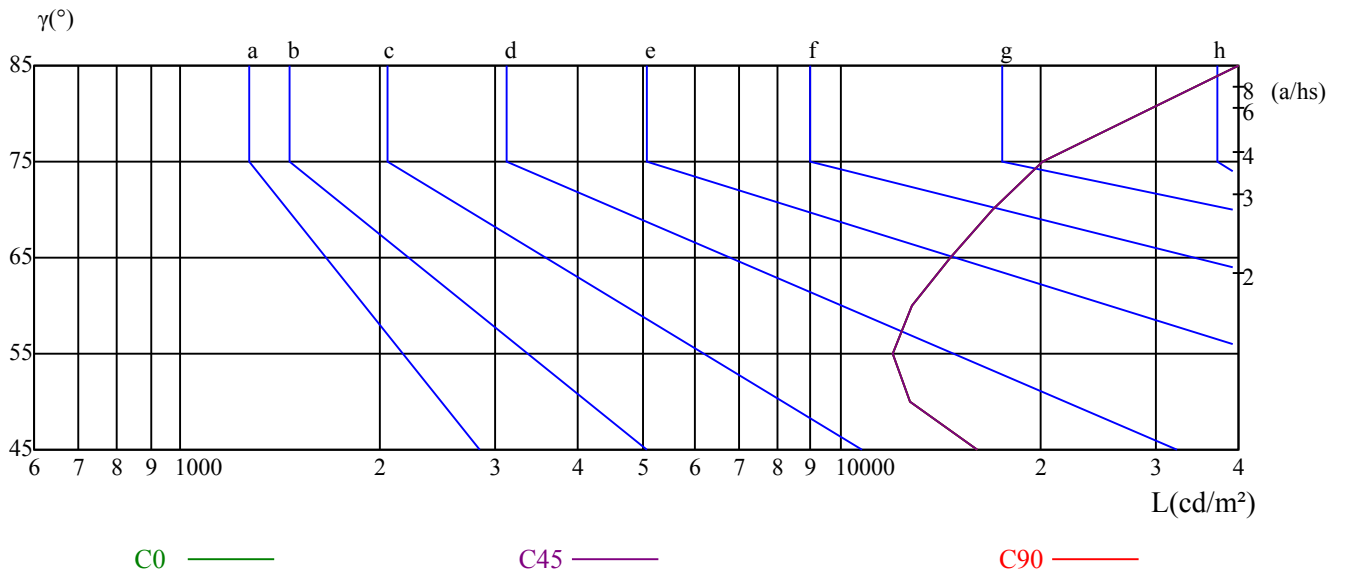
γ	45	50	55	60	65	70	75	80	85
C0	16110	12707	11994	12838	14615	16996	20243	28497	54367
C45	16110	12707	11994	12838	14615	16996	20243	28497	54367
C90	16110	12707	11994	12838	14615	16996	20243	28497	54367

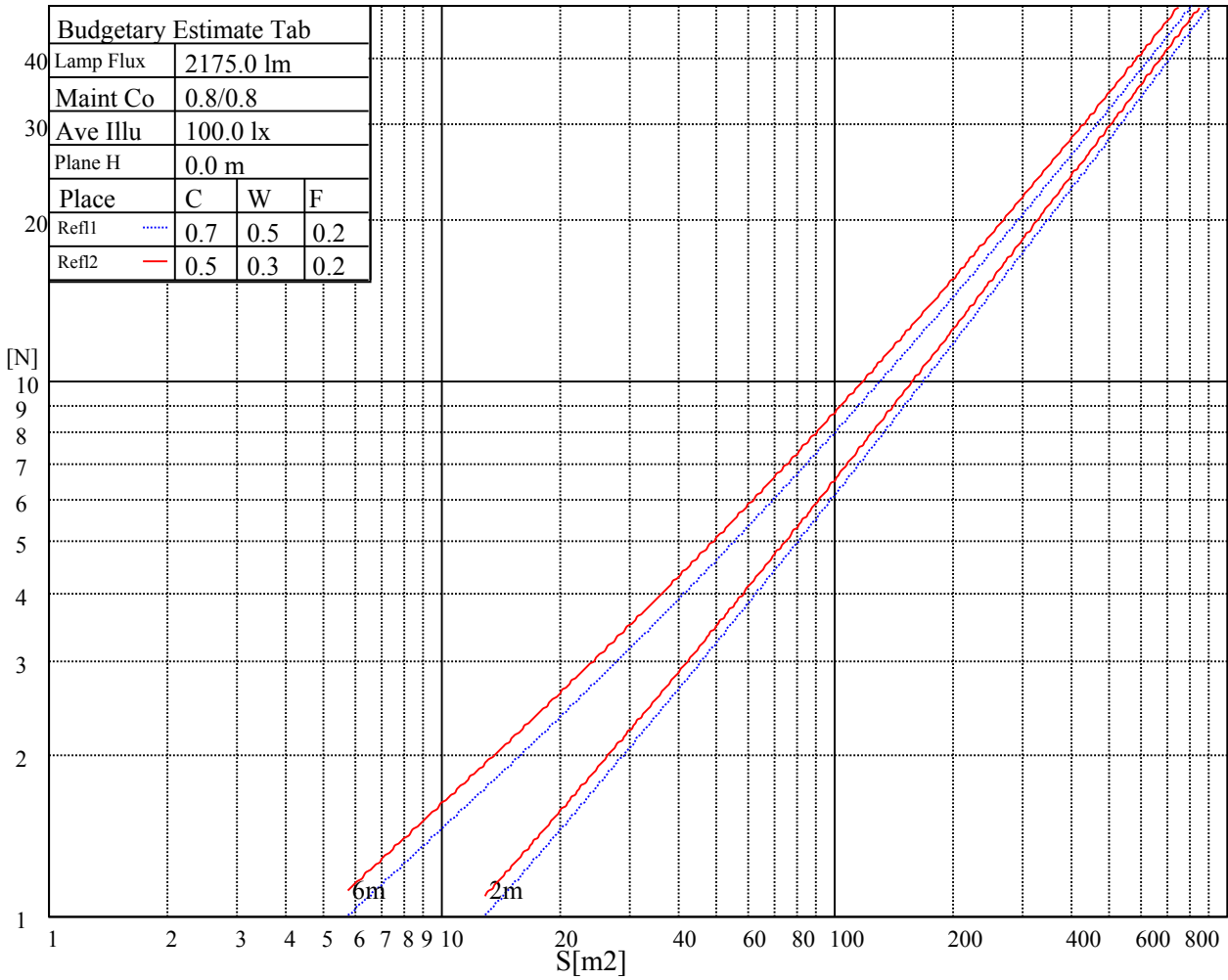
L(Hor)(65)	L(Ver)(65)	L45(65)	L(Hor)(75)	L(Ver)(75)	L45(75)	L(Hor)(85)	L(Ver)(85)	L45(85)
14615	14615	14615	20243	20243	20243	54367	54367	54367

Glare Table

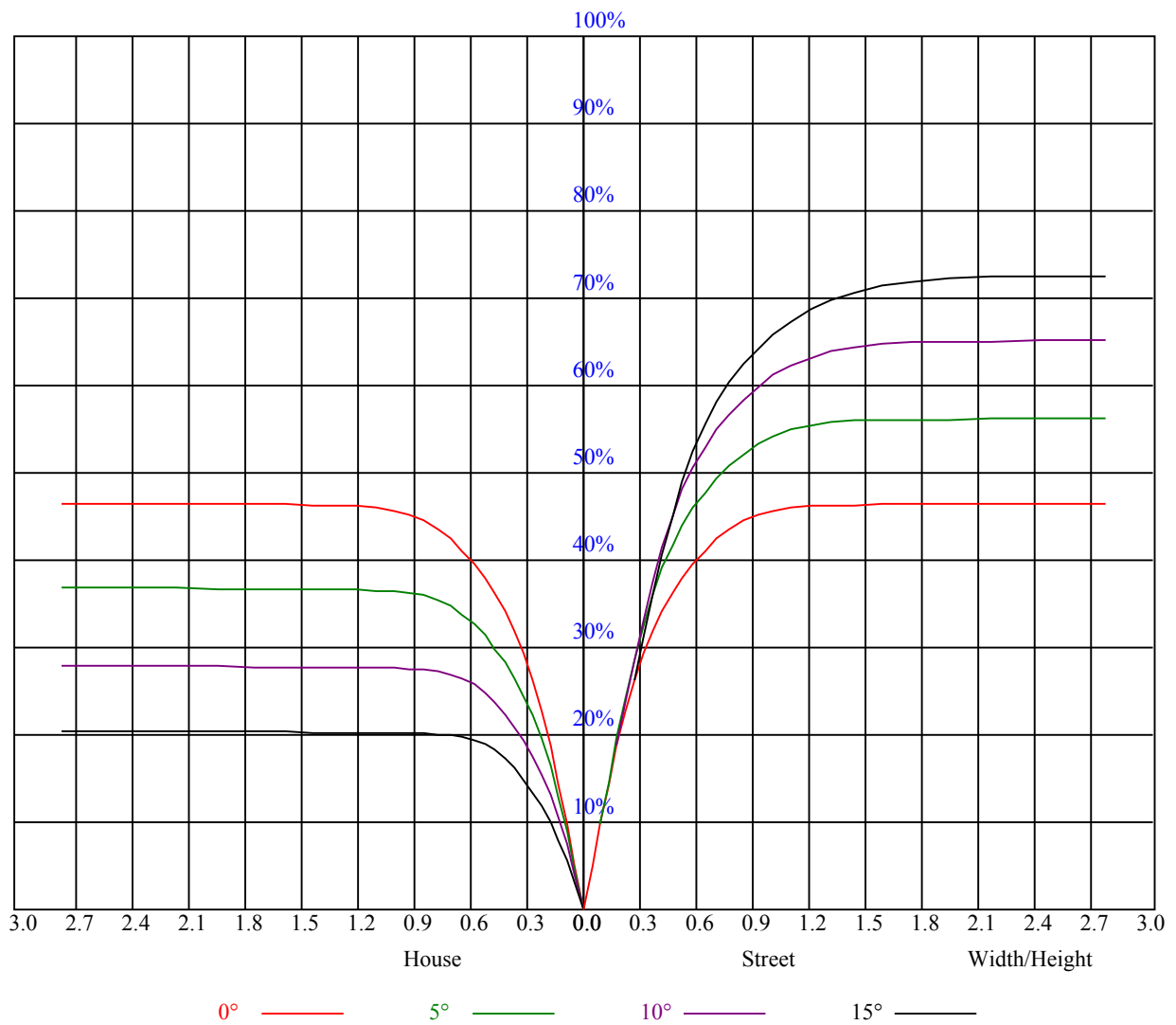
Glare	Quality	Service Values Illuminance(lx)							
1.15	A	2000	1000	500	<=300				
1.5	B		2000	1000	500	<=300			
1.85	C			2000	1000	500	<=300		
2.2	D				2000	1000	500	<=300	
2.55	E					2000	1000	500	<=300
		a	b	c	d	e	f	g	h

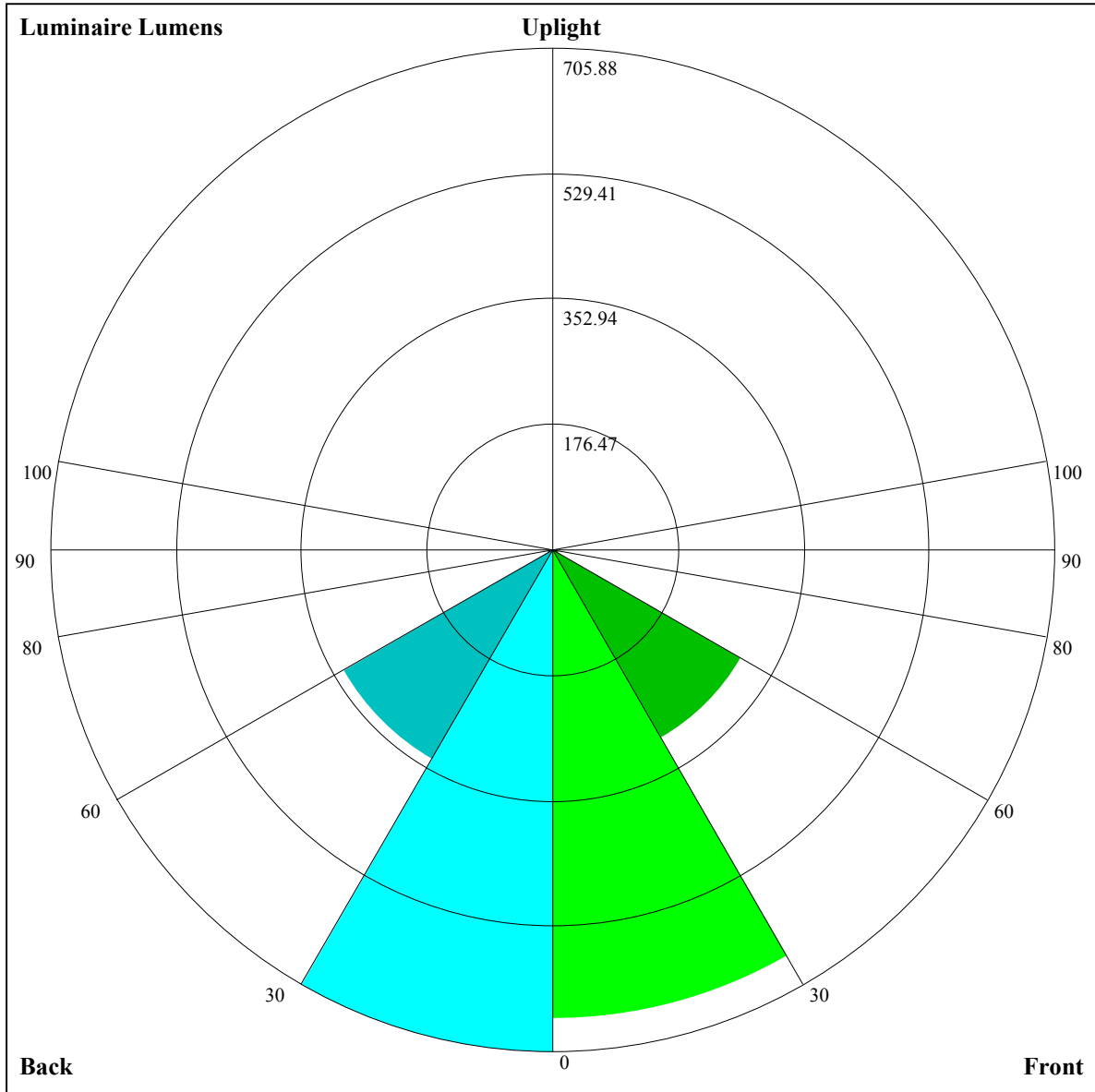
Luminance Limiting Curve





RHOCC	80			70			50			30			10			0
RHOW	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR	COEFFICIENTS OF UTILIZATION RHOFC=20 CU															
0	1.11	1.11	1.11	1.09	1.09	1.09	1.04	1.04	1.04	1.00	1.00	1.00	0.96	0.96	0.96	0.94
1	1.03	1.01	0.99	1.01	0.99	0.97	0.98	0.96	0.94	0.94	0.93	0.92	0.91	0.90	0.89	0.87
2	0.96	0.92	0.89	0.95	0.91	0.88	0.92	0.89	0.86	0.89	0.86	0.84	0.86	0.84	0.83	0.81
3	0.90	0.85	0.81	0.88	0.84	0.81	0.86	0.82	0.79	0.84	0.81	0.78	0.82	0.79	0.77	0.76
4	0.84	0.79	0.75	0.83	0.78	0.74	0.81	0.77	0.74	0.79	0.76	0.73	0.77	0.74	0.72	0.70
5	0.79	0.73	0.69	0.78	0.73	0.69	0.76	0.72	0.68	0.75	0.71	0.68	0.73	0.70	0.67	0.66
6	0.74	0.69	0.65	0.73	0.68	0.64	0.72	0.67	0.64	0.71	0.67	0.63	0.69	0.66	0.63	0.62
7	0.70	0.64	0.60	0.69	0.64	0.60	0.68	0.63	0.60	0.67	0.63	0.60	0.66	0.62	0.59	0.58
8	0.66	0.60	0.57	0.65	0.60	0.57	0.64	0.60	0.56	0.63	0.59	0.56	0.63	0.59	0.56	0.55
9	0.63	0.57	0.53	0.62	0.57	0.53	0.61	0.56	0.53	0.60	0.56	0.53	0.60	0.56	0.53	0.52
10	0.59	0.54	0.51	0.59	0.54	0.50	0.58	0.54	0.50	0.57	0.53	0.50	0.57	0.53	0.50	0.49





Luminaire Lumens:

FL=660.13,FM=305.64,FH=7.78,FVH=4

BL=705.88,BM=340.9,BH=7.86,BVH=4.01

UL=0,UH=0

BUG Rating:B2-U0-G0

NT 1633-M 铝反光罩

Intensity data(cd)

C/γ(°)	0.0	1.0	2.0	3.0	4.0	5.0	6.0	7.0	8.0
0.0	3370.37	3358.66	3338.18	3318.28	3278.49	3232.26	3173.15	3099.41	2985.29
45.0	3381.49	3375.64	3366.86	3356.32	3339.35	3307.75	3268.54	3226.99	3140.96
90.0	3380.90	3380.32	3373.88	3363.35	3345.20	3321.80	3279.66	3217.63	3145.64
135.0	3375.05	3383.83	3384.41	3376.81	3370.37	3356.32	3330.57	3295.46	3231.67
180.0	3370.37	3382.66	3381.49	3375.64	3371.54	3352.81	3329.40	3300.14	3249.23
225.0	3381.49	3376.81	3365.10	3353.98	3336.43	3304.24	3263.27	3212.94	3147.98
270.0	3380.90	3380.32	3372.12	3359.84	3339.35	3317.11	3284.34	3239.28	3167.30
315.0	3375.05	3365.10	3344.03	3324.14	3295.46	3255.08	3188.95	3117.55	3030.35
360.0	3370.37	3358.66	3338.18	3318.28	3278.49	3232.26	3173.15	3099.41	2985.29
C/γ(°)	9.0	10.0	11.0	12.0	13.0	14.0	15.0	16.0	17.0
0.0	2879.95	2729.55	2599.04	2460.34	2281.85	2136.71	1986.31	1835.32	1690.19
45.0	3062.54	2968.90	2852.45	2697.36	2560.42	2417.04	2273.66	2089.90	1938.32
90.0	3060.20	2927.35	2804.46	2673.95	2532.91	2353.25	2206.94	2055.37	1902.62
135.0	3170.22	3092.39	2997.58	2859.47	2733.64	2598.46	2454.49	2269.56	2120.33
180.0	3173.15	3101.17	3011.04	2903.36	2752.37	2623.04	2489.61	2339.79	2155.44
225.0	3043.23	2940.81	2830.21	2706.72	2539.35	2400.65	2219.23	2071.76	1923.11
270.0	3089.46	2998.17	2861.81	2736.57	2569.20	2431.08	2291.21	2109.21	1960.56
315.0	2902.29	2786.90	2664.59	2498.38	2360.27	2219.23	2039.57	1892.68	1748.13
360.0	2879.95	2729.55	2599.04	2460.34	2281.85	2136.71	1986.31	1835.32	1690.19
C/γ(°)	18.0	19.0	20.0	21.0	22.0	23.0	24.0	25.0	26.0
0.0	1519.89	1306.87	1164.19	1139.32	1047.44	973.00	898.67	853.38	818.79
45.0	1787.92	1608.26	1472.48	1346.66	1203.87	1103.79	1019.52	931.74	877.90
90.0	1715.35	1573.73	1440.30	1143.47	1143.47	1049.54	972.82	911.25	865.37
135.0	1968.76	1818.94	1637.52	1499.99	1370.66	1222.01	1118.42	1010.74	942.27
180.0	2012.65	1852.88	1704.82	1533.35	1399.92	1277.02	1149.44	1059.32	981.48
225.0	1735.84	1592.46	1455.51	1167.64	1167.64	1095.66	1014.55	946.48	880.71
270.0	1814.26	1666.19	1488.29	1358.95	1240.74	1138.91	1030.05	957.49	900.13
315.0	1607.09	1440.88	1149.56	1149.56	1080.74	1001.79	936.65	874.68	836.17
360.0	1519.89	1306.87	1164.19	1139.32	1047.44	973.00	898.67	853.38	818.79
C/γ(°)	27.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	35.0
0.0	783.50	759.68	737.09	714.33	698.11	682.08	668.21	647.38	622.85
45.0	837.52	805.91	775.48	752.66	731.59	714.03	694.72	680.68	666.04
90.0	820.90	793.57	769.86	748.44	724.63	708.12	692.09	676.93	655.86
135.0	887.84	838.10	808.84	783.67	761.44	736.27	719.30	704.67	689.45
180.0	906.57	860.92	820.54	793.04	769.63	750.32	731.59	711.11	695.31
225.0	842.31	812.00	779.87	756.64	731.82	713.92	697.94	681.85	662.24
270.0	846.29	814.11	786.60	757.92	736.27	718.71	698.23	682.43	668.39
315.0	805.45	773.20	748.62	727.96	705.02	688.40	673.07	657.91	632.16
360.0	783.50	759.68	737.09	714.33	698.11	682.08	668.21	647.38	622.85
C/γ(°)	36.0	37.0	38.0	39.0	40.0	41.0	42.0	43.0	44.0
0.0	595.17	562.69	518.04	479.01	437.57	385.49	342.71	289.16	246.32
45.0	640.88	614.54	576.51	540.22	503.35	455.36	416.15	375.19	334.22
90.0	631.52	596.11	563.34	527.70	482.40	444.24	404.10	353.71	312.10
135.0	671.90	653.17	628.59	591.14	557.78	522.08	474.09	434.30	392.74
180.0	680.68	660.19	637.95	612.20	573.58	539.05	499.26	448.93	406.79
225.0	640.12	613.08	582.01	539.17	501.60	462.27	423.47	372.55	330.83
270.0	649.66	616.89	587.62	554.27	519.15	471.16	431.37	390.40	338.90
315.0	604.42	573.23	539.17	492.58	452.03	410.71	357.63	314.91	262.01
360.0	595.17	562.69	518.04	479.01	437.57	385.49	342.71	289.16	246.32

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Intensity data(cd)

C/γ(°)	45.0	46.0	47.0	48.0	49.0	50.0	51.0	52.0	53.0
0.0	205.47	156.20	119.80	87.96	60.63	35.64	23.99	19.66	17.15
45.0	303.21	303.21	200.03	161.58	116.40	83.57	56.24	30.72	21.36
90.0	271.95	231.81	183.53	147.65	113.59	81.76	49.28	30.08	20.83
135.0	340.66	298.52	298.52	246.26	161.87	125.00	91.70	61.80	33.83
180.0	364.07	310.81	300.28	300.28	182.65	144.61	101.19	70.46	46.00
225.0	280.50	240.82	201.84	154.73	119.50	86.91	53.08	32.60	21.59
270.0	297.94	297.94	204.83	167.43	123.95	91.41	63.09	39.85	24.23
315.0	221.04	181.83	144.61	102.71	72.68	47.34	29.50	19.55	17.15
360.0	205.47	156.20	119.80	87.96	60.63	35.64	23.99	19.66	17.15
C/γ(°)	54.0	55.0	56.0	57.0	58.0	59.0	60.0	61.0	62.0
0.0	13.23	11.24	10.36	9.25	8.49	8.08	7.96	7.84	7.84
45.0	18.79	15.27	12.06	10.59	9.54	8.49	8.19	8.08	7.96
90.0	17.97	15.27	11.76	10.71	9.89	8.90	8.54	8.37	7.90
135.0	22.59	18.67	16.27	14.16	11.59	10.30	9.13	8.25	8.02
180.0	25.52	18.96	17.09	14.57	13.11	11.88	9.89	8.49	8.02
225.0	18.73	15.57	12.47	11.00	10.18	9.19	8.60	8.37	7.96
270.0	18.32	15.98	12.76	10.77	9.83	9.07	8.25	8.02	7.90
315.0	14.63	11.88	10.53	9.77	8.72	8.43	8.02	7.84	7.72
360.0	13.23	11.24	10.36	9.25	8.49	8.08	7.96	7.84	7.84
C/γ(°)	63.0	64.0	65.0	66.0	67.0	68.0	69.0	70.0	71.0
0.0	7.72	7.72	7.67	7.61	7.55	7.55	7.55	7.55	7.49
45.0	7.90	7.84	7.78	7.72	7.67	7.61	7.61	7.55	7.55
90.0	7.84	7.78	7.72	7.67	7.67	7.55	7.55	7.55	7.49
135.0	7.96	7.90	7.78	7.78	7.67	7.67	7.61	7.55	7.55
180.0	7.90	7.84	7.78	7.72	7.72	7.67	7.61	7.61	7.55
225.0	7.84	7.78	7.72	7.72	7.67	7.61	7.61	7.55	7.55
270.0	7.84	7.78	7.72	7.67	7.61	7.61	7.55	7.55	7.55
315.0	7.72	7.67	7.61	7.61	7.55	7.55	7.49	7.49	7.49
360.0	7.72	7.72	7.67	7.61	7.55	7.55	7.55	7.55	7.49
C/γ(°)	72.0	73.0	74.0	75.0	76.0	77.0	78.0	79.0	80.0
0.0	7.49	7.43	7.43	7.37	7.37	7.37	7.37	7.37	7.37
45.0	7.55	7.49	7.49	7.43	7.43	7.43	7.43	7.37	7.37
90.0	7.49	7.49	7.49	7.43	7.43	7.43	7.37	7.37	7.37
135.0	7.55	7.49	7.49	7.49	7.43	7.43	7.43	7.43	7.43
180.0	7.55	7.49	7.49	7.49	7.43	7.43	7.43	7.43	7.37
225.0	7.55	7.49	7.49	7.49	7.43	7.43	7.43	7.37	7.37
270.0	7.55	7.49	7.49	7.43	7.43	7.43	7.43	7.43	7.43
315.0	7.49	7.43	7.43	7.43	7.43	7.37	7.43	7.37	7.37
360.0	7.49	7.43	7.43	7.37	7.37	7.37	7.37	7.37	7.37
C/γ(°)	81.0	82.0	83.0	84.0	85.0	86.0	87.0	88.0	89.0
0.0	7.37	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.26
45.0	7.37	7.37	7.37	7.32	7.37	7.32	7.32	7.32	7.32
90.0	7.37	7.37	7.37	7.37	7.32	7.32	7.32	7.32	7.32
135.0	7.43	7.37	7.37	7.37	7.37	7.37	7.32	7.37	7.32
180.0	7.37	7.37	7.37	7.37	7.37	7.32	7.32	7.32	7.32
225.0	7.37	7.37	7.32	7.37	7.32	7.32	7.32	7.32	7.32
270.0	7.37	7.37	7.37	7.37	7.32	7.32	7.32	7.32	7.32
315.0	7.37	7.32	7.37	7.32	7.32	7.32	7.32	7.32	7.32
360.0	7.37	7.32	7.32	7.32	7.32	7.32	7.32	7.32	7.26

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Intensity data(cd)

Appendix Page: 19 Total:19

C/γ(°)	90.0
0.0	7.32
45.0	7.32
90.0	7.32
135.0	7.32
180.0	7.32
225.0	7.32
270.0	7.32
315.0	7.32
360.0	7.32